

Course Objectives/Course Outline
Spokane Community College

Course Title: Introduction to Mathematical Literacy for
College Students

Prefix and Course Number: MATH 87

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Add, subtract, multiply and divide fractions.
- Convert between fractions and decimals, improper fractions and mixed numbers.
- Add, subtract, multiply and divide signed numbers.
- Apply basic properties of exponents to whole number exponents.
- Simplify algebraic expressions by combining like terms.
- Identify and simplify like algebraic terms.
- Interpret and construct bar graphs, pie graphs, and scatter plots.
- Identify and Graph ordered pairs in the Cartesian plane.
- Identify and use appropriate scales on graphs.
- Identify and interpret slopes and rates of change on a graph.
- Write ratios, rates, and proportions.
- Determine if two expressions form a proportion.
- Perform unit conversions and use them to scale quantities up or down.
- Write fractions and decimals as percents.
- Set up and solve application problems using fractions, slopes, rates, proportions, percent and unit analysis.

Course Outline:

- I. Expressions
 - A. Fractions
 - B. Order of Operations
 - C. Associative, Commutative and Distributive Properties
 - D. Like Terms
 - E. Applications
- II. Graphs
 - A. Bar and Pie Charts
 - B. Plotting Ordered Pairs/Cartesian Plane
 - C. Using Appropriate Scales
 - D. Scatterplots
 - E. Slopes and Rates
 - F. Applications
- III. Proportional Reasoning
 - A. Rates
 - B. Unit Conversions and Analysis
 - C. Proportions
 - D. Percents